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Toxic Chemical Release Inventory Questions and Answers; Section 313 of the Emergency Planning and Community Right-to-Know Act

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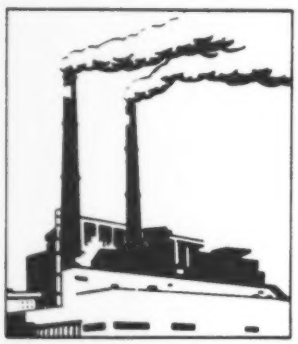
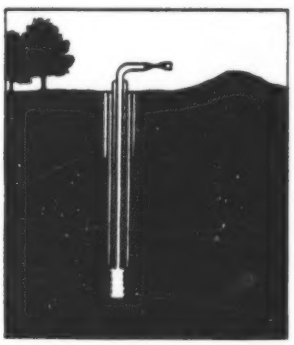
Toxic Chemical Release Inventory Questions and Answers

Section 313
of the Emergency Planning and Community Right-to-Know Act
(Title III of the Superfund Amendments and Reauthorization Act of 1986)





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This Question & Answers document has been prepared to help clarify reporting requirements under Section 313 of the Emergency Planning and Community Right-to-Know Act (Title III of the Superfund Amendments and Reauthorization Act of 1986, Public Law 99-499).

This document has been developed to expedite facility reporting and to provide additional explanation of reporting requiremetns. It supplements the instructions for completing Form R.

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INTRODUCTION

This Questions and Answers document has been prepared to help clarify reporting requirements under section 313 of the Emergency Planning and Community Right-to-Know Act (Title III of the Superfund Amendments and Reauthorization Act of 1986, Public Law 99-499). Under section 313, facilities that meet all three of the following criteria are required to report releases to the air, water, and land of any specifically listed toxic chemicals:

- The facility has 10 or more full-time employees;
- The facility is included in Standard Industrial Classification (SIC) Codes 20 through 39; and
- The facility manufactured (defined to include imported), processed, or otherwise used in the course of a calendar year any specified chemical in quantities greater than a set threshold.

Reports under section 313 (EPA Form R) must be submitted annually to EPA and designated State agencies. Reports are due by July 1 and cover activities at the facility during the previous calendar year.

This document has been developed to expedite facility reporting and to provide additional explanation of the reporting requirements. It supplements the instructions for completing Form R. Copies of EPA Form R, instructions for completing the form, and related guidance documents are available from the Section 313 Document Distribution Center, P.O. Box 12505, Cincinnati, Ohio 45212. (A request form is provided at the end of this document for use in obtaining copies of these documents.)

The questions and answers in this document are organized in sections as listed in the table of contents on the following page. An index at the end of the document lists question numbers by topic.

To remain responsive to section 313 issues that may arise in the future, this Questions and Answers document will be updated periodically. If you have comments or possible additions to this document, please send them to the Emergency Planning and Community Right-to-Know Information Hotline at the U.S. Environmental Protection Agency, WH-562A, 401 M Street, S.W., Washington, D.C. 20460, (800) 535-0202 (or (202) 479-2449, Washington, D.C. and Alaska).

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I. DETERMINING WHETHER OR NOT TO REPORT: FACILITY

A. Types of Facilities That Must Report

1. What facilities are subject to section 313 reporting?

Section 313 reporting applies to facilities that meet three criteria: have 10 or more full-time employees; are in the manufacturing sector (in SIC major groups 20 through 39 inclusive); and exceed any one threshold for manufacturing (including importing), processing, or otherwise using a toxic chemical listed in 40 CFR Part 372.65.

2. When a facility has been sold or otherwise changed hands during the year, who is responsible for making the report?

The last owner/operator of the facility during a reporting year is responsible for making the report, unless the sales or transfer agreement states that the seller will assume this reporting responsibility. In either event, the report will be submitted to cover the full year.

3. Is a facility meeting the criteria described in question one required to report if they had no releases of the toxic chemicals during the calendar year?

Yes. The requirements for reporting under section 313 are based only upon the industrial classification of the facility, number of employees, and what quantity of a toxic chemical was manufactured, processed, or otherwise used during the calendar year. The amount of toxic chemical released does not affect reporting requirements (except in the case of exemptions for articles). The facility described would report zeros in the release estimate section of the form.

4. Must an annual report be submitted by July 1, 1989 for facilities which were in operation part of 1988 but which were closed on December 31, 1988?

Yes. A facility that operated during any part of a reporting year must report if it meets the reporting criteria.

5. Is a facility with SIC code 5161 required to report?

If the primary SIC code of a facility falls outside of the range of 20-39, then the facility is not required to report. A facility with SIC code 5161 is not required to report.

6. Suppose a facility is comprised of several establishments, some of which have primary SIC codes within the 20-39 range, and some of which have primary SIC codes outside that range. How would this facility determine if it needs to report?

The facility must report if those establishments that are in SIC codes 20-39 have a combined value of more than 50 percent of the total value of products shipped or produced by the whole facility, or one of those SIC code 20-39 establishments has a value of products shipped or produced that is greater than any other establishment in the facility.

7. Do pilot plants within the SIC classification have to report?

A pilot plant within the appropriate SIC codes would be a covered facility, provided it meets the employee and threshold criteria.

8. Must a Treatment, Storage or Disposal Facility (TSDF) report under section 313?

A TSDF may or may not be subject to section 313 reporting, depending on the activities at the site. The TSDF must determine its primary SIC code based on the various types of activities that occur at the site.

9. An ancillary wastewater treatment plant has taken on the SIC code of a covered facility because it primarily services a covered facility. Does the facility where the treatment plant is located have to report even if the rest of the establishments at that facility are not in SIC codes 20-39?

No, a facility must report only if it meets employee, SIC code and activity criteria. The SIC code criteria are not met by the establishments that represent the major part of the goods and services produced at the facility containing the wastewater treatment plant. Therefore, the facility as a whole need not report. The covered facility producing the waste must report the off-site transfer to the facility containing the wastewater treatment plant.

10. In Alaska, several fish processors have factories on ships. They use ammonia and chlorine in their fish processing operations. Is each ship a "facility" covered under section 313 or is the whole group of ships (assume one company) a covered facility?

A facility is defined as all buildings, equipment, structures, and other stationary items which are located on a single site or adjacent contiguous sites owned or operated by the same person. A ship is not a facility as defined under section 313. It is not stationary and it is not located on a single site (if it moves to other locations). Therefore the ships should not report even if they are in SIC Codes 20-39.

11. A barge repair facility (SIC Code 3731 - ship building and repairing) cleans barges at their facility by vacuuming out residual chemicals and selling the waste to a chemical recovery company. Must the facility report for the waste? Is it a processor under section 313? What if the waste is not sold?

Because the facility sells the waste, it is a processor. The amount of waste sold does not need to be reported as an off-site transfer because off-site transfers for recycling/reuse are exempt from reporting. Releases such as

spills and cleanup of tools must be reported if the facility exceeds the processing threshold. If the waste is not sold, the facility is not manufacturing, processing or using the chemical and is not subject to reporting.

B. Full-Time Employee Threshold

12. Does the full-time employee determination include the hours worked by sales staff whose office is included in the same building as the production staff? This sales staff is not connected with the production facility in any way.

Yes. All employees at a facility, regardless of function or location in a building, count toward the employee threshold determination.

13. Would a facility with nine full-time employees and four part-time employees be required to report under section 313?

The total hours worked by all employees should be reviewed. A "full-time employee" is defined on a full-time equivalent basis of 2000 labor hours per year. If the total hours worked by all employees at a facility, including contractors, is 20,000 or more, the criterion for number of employees has been met.

14. An establishment leases one acre of land adjacent to the reporting facility from a three-acre strawberry farm. The facility imports and repackages methyl bromide for sale and distribution. Does the facility have to include the strawberry pickers when determining whether the 10 full-time employee equivalent criterion applies?

The reporting facility should not tabulate the hours worked by farm workers it does not pay. If, however, the reporting facility actually employs or contracts with these farm workers, then the hours worked on-site by these workers would count towards the 10 full-time employee equivalent.

C. Persons Responsible for Reporting

15. Is the owner or the operator responsible for reporting?

Either the owner or the operator is subject to the section 313 reporting requirements. If no report is received from a covered facility, both persons are liable for penalties. As a practical matter, EPA believes that the operator is more likely to have the information necessary for reporting.

16. Would an owner of a facility who has no knowledge of any operations at the facility be responsible for reporting?

An owner with business interest in the facility, beyond owning the real estate on which the covered facility is located, must report. Neither owners who are part of the same business organization as the operators, nor owners of businesses that contract out the operation of a particular site, are exempt from reporting.

17. Who is the parent company for a 50/50 joint venture?

The 50/50 joint venture is its own parent company.

18. Company A owns a facility which manufactures crude oil. It sells the crude oil to Company B, but the oil is kept in tanks on Company A's facility that are leased to Company B. Who is subject to reporting under section 313?

Since tanks are part of Company A's facility and they are the owner and/or operator of the facility, Company A would be subject to section 313 reporting for any releases from the tanks.

19. How would a facility report chemicals in wastes that are treated in waste treatment units that it does not own? For example, if a facility sold a unit that is within its contiguous property to another company, which facility should report?

The facility creating the waste would report the chemicals as an off-site transfer. The treating facility would not need to report unless they manufacture, process or otherwise use the same chemical in excess of the thresholds. In that case, they would report any releases resulting from wastes as part of their total annual releases of the chemical.

20. Must importers/exporters report for materials stored in public warehouses?

Owners or operators of covered facilities must report. If importers/exporters neither own nor operate the warehouse, they would not need to report for that warehouse.

21. A fish processor rents space in a building. The refrigeration system in the building uses ammonia. The building owner supplies the ammonia, runs the refrigeration system, and bills the fish processor based on the amount of fish processed. Must the fish processor report for ammonia? Another business, a frozen food packager, also uses the refrigeration system, but is a separate company from the fish processor.

The owner of the building should report on the ammonia, if the threshold for ammonia is exceeded, since he is operating the system -- he has more than just a real estate interest in the property. Since the facility (both businesses) is in SIC 20-39 and he is operating part of that facility, he should report.

22. Mom and Pop Plastics is a wholly owned subsidiary of a major chemical company which is a wholly owned subsidiary of Big Oil Corp. Which is the parent company?

Big Oil Corporation is the parent company.

D. Multi-Establishment Facilities

23. Each establishment of a multi-establishment facility files its own Form R for a toxic chemical. The waste that this multi-establishment facility ships off-site is inventoried on an entire facility basis. To report this waste, does each establishment estimate their percentage of the total waste or can one establishment report the entire waste?

If individual establishments or groups of establishments report separately for one chemical, they must continue to report separately for all chemicals. Therefore, in the case cited above one establishment cannot report the offsite transport quantity of a chemical in waste from the entire facility. Each establishment would have to report their percentage of the transfer quantity.

24. Two manufacturing establishments, owned by the same corporation, are divided by a public railroad. One establishment has rented parking lot space from the other establishment, and a walkway was constructed so the employees can go over the railroad tracks to the parking lot. Is this a multi-establishment facility or two separate facilities?

Two establishments owned by the same corporation separated by a railroad constitute one facility for section 313, since they are still physically adjacent to one another except for a public right-of-way. Therefore, reporting thresholds would be determined by the combined chemical volumes processed, manufactured, or used at both establishments.

25. A facility is filing separate reports for section 313 for each establishment within a facility. How would a transfer of a toxic chemical to another establishment within the facility be reported? (i.e., transfers waste to another establishment that then treats and disposes the toxic chemical).

Inter-facility transfer of wastes would not constitute off-site transport and would not be reported. An establishment need only report releases to the environment and wastes that are transferred off-site from the facility.

26. Do I have to report if the value of laboratory research at my facility is greater than 50 percent of the total value of goods and services produced at my facility?

If the research laboratory is a separate establishment from the manufacturing activities and its SIC code is not between 20 and 39, then the 50 percent test is used to determine if the whole facility is in SIC codes 20-39. Some laboratories may be considered within SIC codes 20-39 because they are "auxiliary" facilities providing research to support manufacturing operations. In which case, the whole facility is covered.

27. Is an off-site landfill subject to reporting under section 313 if it a) is not part of a "covered facility" in that it is not contiguous or adjacent to the property of the reporting facility, and/or b) does not fall within SIC Codes 20-39?

A landfill, as a separate facility, is not subject to reporting because it is not in SIC Codes 20-39. However, a manufacturing facility, within SIC Codes 20-39 which meets reporting criteria, must list an off-site landfill (company-owned or not) on the reporting form (Part II of EPA Form R) if they transfer wastes containing the toxic chemical to that landfill for disposal.

28. For reporting year 1988, if a company has a plant in one state which processes 27,000 pounds of methanol and a plant in another state which processes the same amount of methanol, do both plants have to report as "establishments" of a "facility"?

No. The two processing plants are separate facilities because they are not located within the same contiguous physical boundary. Thus, their activities are not additive, and neither would report for methanol in 1988 because the processing threshold of 50,000 pounds has not been met by either facility. However, if either facility processes 27,000 pounds of methanol in 1989, it would have to file a Form R by July 1, 1990.

E. Form R Requirements

29. After contacting Dun & Bradstreet several times to obtain DUNS numbers for several facilities, a consulting firm was told by D&B that they will give out the DUNS number only to the individual facilities. Does the consulting firm have any recourse for obtaining these numbers?

The facility or financial officers may know the number, or may need to call D&B themselves. Company headquarters DUNS numbers are in Dun and Bradstreet reference publications, Reference Book of Corporate Management and Million Dollar Directory, available at some public libraries. Some libraries conduct computer searches of the DUNS Market Identifiers database for a fee to obtain individual facility DUNS numbers. DUNS numbers are also available through online services (e.g., DIALOG). If a facility does not subscribe to the D&B service, a "support number" can be obtained from the Dun & Bradstreet center located in Allentown, Pennsylvania (telephone (215) 391-1886).

30. If a facility does not have a Dun & Bradstreet number but the parent corporation does, should this number be reported?

Report the Dun and Bradstreet Number for the facility. If a facility does not have a Dun and Bradstreet Number, enter N/A in Part I, Section 3.7. The corporate Dun and Bradstreet Number should be entered in Part I, Section 4.2 relating to parent company information.

31. If two plants are separate establishments under the same site management, must they have separate Dun & Bradstreet numbers?

They may have separate Dun & Bradstreet numbers, especially if they are distinctly separate business units. However, different divisions of a company located in the same facility usually do not have separate Dun & Bradstreet numbers.

32. If you have an NPDES permit, but do not discharge toxic chemicals to surface water, do you have to fill in Section 3.10?

Yes. This information is part of the facility identification section of Form R and is intended for use in obtaining other information about the facility.

33. A facility is composed of two separate establishments and is filing two separate Form R's for section 313 reporting. For Part I, Section 3.5, what SIC codes are to be listed?

Enter only the SIC codes of the establishments whose data is included in the report (Part I Section 3.5). SIC codes for the other establishments of the facility would be included in their own Form R submittal.

34. What is the definition of primary SIC code? How can there be more than one primary SIC code for a facility?

A primary SIC code generally represents those goods produced or services performed by an establishment that have the highest value of production or produce the most revenues for the establishment. The form provides space for more than one primary SIC code because a facility may be made up of several establishments, each of which may have a different primary SIC code.

35. Clarify the application of SIC Codes for facility versus establishment?

The SIC code system classifies businesses on the basis of an "establishment", which is generally a single business unit at one location. Many section 313 covered facilities will be equivalent to an establishment. However, a reporting facility can encompass several establishments located within a property boundary, owned/operated by the same "entity." Therefore, a facility can be a multi-establishment complex.

36. Our facility operations cover a large area. What longitude should be reported for our facility and how can we locate this information?

Report the latitude and longitude for a location central to the operations for which you are reporting. You may find this information on your NPDES permit. See the instructions for completing Form R for a detailed description for determining longitude and latitude from USGS maps of your facility location.

F. Chemical Activity Threshold Determinations

37. If a facility buys 10,000 pounds of a listed chemical in 1988 and creates a mixture, for example a metal cleaning bath, and then uses the bath that year and the next calendar year, how do they determine thresholds for both years?

The threshold applies to the total amount of the chemical otherwise used during the calendar year. The facility would count the entire 10,000 pounds and any amount added to the bath during that year toward the otherwise use threshold the first year. The use of this bath during the second year constitutes reuse/recycle of the mixture. Therefore, only the amount of the

chemical added to the bath during the second year (1989) would be counted toward the use threshold determination for the second year.

38. A facility manufactures "non-article" metal items. If all wastes from both manufacturing processes are recycled, are the items still subject to threshold determinations?

If a "non-article" metal item is processed, but all wastes are recycled, the item is still subject to threshold determinations, the chemicals therein must be reported if thresholds are met, but releases would be reported as zero.

39. A facility knows only the minimum concentration of a chemical in a mixture used in their operations. How should they report?

The facility should use the minimum concentration for threshold and release calculations because this is the best information they have.

40. If you operate a treatment plant as part of remediating a Superfund site on your facility, do contaminants (already there, not being added to) have to be included in calculating thresholds? Releases?

Such material is not included in threshold determinations since it is not being manufactured, processed, or used. Release reporting is required if the SIC code, employee number and threshold criteria are met for the chemical. In that event, a release does not include material already in a landfill, but does include any material released to the environment by remedial activity or transferred off-site.

41. Must a facility include welding rods, solders, and the metals being joined during a welding or soldering job in threshold determination?

Yes, however, if no releases occur from the joined metal parts themselves they may be considered articles and only the welding rods or solder must be assessed for threshold purposes.

42. A chemical manufacturer (SIC Code 28) receives other facilities' wastes containing toxic chemicals and disposes of them in their deep well. Does the receiving facility need to report these toxic chemicals?

The receiving and disposing of toxic chemicals would not be factored into a threshold determination because it does not fit any definition of process or otherwise use. However, if the manufacturing facility manufactures, processes or "otherwise uses" the same toxic chemical above the threshold amount, the disposal would be reported as a release on Form R even though the amount of waste was not included in the threshold determination.

43. If a facility uses a recycle or reuse system, how does it determine the amount that it must consider for threshold determinations?

For recycle or reuse, the amount considered used for a threshold determination is the amount added to the system during the year. If the system is completely empty and is started up during the year, a facility determines the amount used by adding the total amount needed to charge the system to any amount which is added to the system during the year.

44. If a facility manufacturers 47,000 pounds, processes 28,000 pounds, and imports 6,000 pounds of chemical X during 1988, is it required to report for chemical X?

For 1988, the facility would have to report chemical X because it would have exceeded the manufacture threshold of 50,000 pounds. Note that importing is the equivalent of manufacturing and therefore the amounts must be added together for threshold determinations.

45. Are barge loading/unloading releases exempt?

Such releases must be reported if the barge terminal is part of a covered facility.

46. Our facility purchases a mixture containing toxic chemicals. We store it and then sell it to our customers without even opening the boxes. Must we report on these chemicals?

Report on toxic chemicals that your facility manufactures, processes, or otherwise uses in excess of the thresholds, but do not report on standing inventory. Since you are not using the chemicals, you do not have to report.

47. How are warehouses affected by section 313?

A warehouse located within the physical boundary of a "covered facility" is covered for estimating releases. Warehouse contents are not used in threshold determinations, because thresholds are based on manufacture, process, or use (i.e., throughput rather than storage volume). Repackaging at a warehouse is considered processing and the quantities would have to be factored into facility process threshold determinations.

G. Auxiliary Facilities

48. Are "auxiliary" facilities associated with manufacturing operations in SIC codes 20 through 39 exempt from reporting under section 313?

No. An "auxiliary facility" is one that directly supports another establishment's activities and therefore takes the SIC code of the facility supported. Auxiliary facilities located on separate property must report if they meet the employee and chemical thresholds. Auxiliary establishments that are part of multi-establishment facilities should be included in facility threshold determinations. For example, a spill from the warehouse would be included in the covered facility's release quantities.

49. An airplane engine repair shop (generally SIC 7699) owns an "auxiliary" facility at a separate location that does metal plating (generally SIC 3471 -- Plating of Metals and Formed Products). Would the plating facility be exempt?

According to the SIC code manual, this plating facility would not be "auxiliary" but would be considered a separate operating establishment conducting a manufacturing activity. It would, therefore, need to make the employee and threshold determinations and report, if appropriate, because it falls between SIC codes 20-39.

II. DETERMINING WHETHER TO REPORT: LISTED CHEMICALS

A. General Questions

50. What list of chemicals is subject to reporting under section 313?

The law defined the list of toxic chemicals. The initial list (with certain technical modifications and revisions) appears in the final rule and in the instruction booklet for completing EPA Form R.

51. What is the difference between the section 313 list and other Title III lists?

Some overlaps exist between lists of chemicals covered by different sections of the law. Section 313 focuses on chemicals that may cause chronic health and environmental effects. The section 313 list was developed from lists of regulated chemicals in New Jersey and Maryland. The EPA "List of Lists" document identifies chemicals that are specifically listed and must be reported under Sections 304 and 313 of Title III.

52. Can common or trade names other than those listed in the rule be used for submissions?

No. EPA has provided a list of standard chemical names and CAS numbers for all chemicals which must be reported. The rule requires the use of these standard names. Many 1987 forms could not be processed because unlisted CAS numbers or names were used.

53. We use a chemical with a CAS number not on the list of section 313 toxic chemicals. There are similar chemicals on the list, but none with the same CAS number. How can I be sure I don't have to report?

Only chemicals that are specifically listed or part of a specifically listed category of chemicals need to be reported. If neither the name nor the CAS number fits the list (and the chemical is not part of a listed category), it is not reportable.

54. How are chemical categories handled under section 313 threshold determinations and release reporting?

All chemicals in the category that are manufactured, processed or otherwise used at a facility must be totaled and compared to the appropriate thresholds. Threshold determination for chemical categories is based on the total weight of the compound. Releases of metal compounds are reported as releases of the parent metal portion of the compounds. If the metal and corresponding metal compounds exceed thresholds, a joint report for metal compounds, including the parent metal, can cover both reporting requirements.

55. If an item on the section 313 list covers chemicals with multiple CAS numbers (e.g., nickel compounds), how is the CAS number of the item described?

Do not enter CAS number in such cases. Instead, enter "N/A" in the space for the CAS number on Form R. The individual chemical members of a listed category are not required to be and should not be identified in the report.

56. Do the chemical categories such as nickel compounds include all compounds, even those which have not been associated with adverse health effects? What is the authority for this decision?

The section 313 list established by Congressional legislation included categories. EPA interprets these listings to mean all compounds of nickel for example, regardless of whether specific toxicological problems have been identified for a specific compound in the category.

57. Must uses of listed chemicals as fumigants be reported if other criteria and thresholds are met?

Yes.

58. Some chemicals released into the environment react to form other chemicals or chemical compounds, for example phosphorus (a listed chemical) oxidizes in air to form phosphorus pentoxide (not a listed chemical). Which should be reported, the transformed chemical or the source chemical? How would the report(s) be prepared if both the source and result chemical are listed?

Report releases of the listed chemical. The facility is not responsible for reporting a chemical resulting from a conversion in the environment.

59. I have hydrochloric acid with a listed content of 100 percent HCl. I know that means 37 percent HCl and 63 percent water - there is no higher concentration made. Which concentration must I use for threshold determination?

You should calculate the HCl content based upon the 37 percent concentration.

60. A facility meets the threshold for "otherwise use" of 1,1,1-Trichloroethane as a cleaner. Would the release of that chemical contained in the office supply product "white-out" also be included?

Office products fall within the same realm as the personal use and janitorial maintenance exemptions; the release of 1,1,1, trichloroethane in "white-out" would not be reported.

61. A facility receives a chemical mixture, 70 percent of which is toluene diisocyanate. Of this 70 percent, the supplier has told them that 80 percent is 2,4-TDI, with CAS number 584-84-9, and 20 percent is 2,6-TDI, with CAS number 91-08-7. The CAS number that appears on the MSDS for TDI is 26471-62-5, which is not on the section 313 list. Should the facility report?

CAS number 26471-62-5 represents the mixture of the 2,4 and 2,6 TDI isomers. Each of these isomers are reportable under section 313. Since the facility knows that the two listed isomers are in the formulation and knows the concentration of each isomer, the facility should report if the individual thresholds are exceeded.

B. Chemicals in Solution

62. What is the strict interpretation of a sodium sulfate solution? Does it have to be in solution when it leaves your facility? Should I consider the quantity of the entire solution or just the weight fraction of sodium sulfate? Why did EPA add the qualifier (solution) to the listing of sodium hydroxide and sodium sulfate. Should sodium hydroxide pellets be ignored?

Only the actual quantity of sodium sulfate in the solution should be considered for threshold or release determinations. Congress included the solution qualifier on the section 313 list because this qualifier was used in one of the state lists which served as the basis for the 313 list. Solid forms of chemicals which are listed as solutions should not be included in threshold and release calculations. Solid pellets of sodium hydroxide should not be factored into threshold release calculations. However, if the solid is made into a solution at any point in the process, then it becomes reportable.

63. In determining maximum amount on-site and thresholds, do we count the water in solutions (e.g., NaOH, NH_4NO_3, NA_2SO_4)? Do we count the nonmetal portion of metal compounds?

Exclude the water in solutions. The nonmetal portion of metal compounds is included.

64. How is ammonium hydroxide in solutions (i.e., "aqua ammonia") counted?

Ammonia is the listed chemical; ammonium hydroxide is not a listed section 313 chemical and has it's own CAS number. Commercial products of "aqua ammonia" or "ammonium hydroxide" solutions are approximately 30 percent solutions of ammonia in water. These products are considered mixtures of the reportable chemical ammonia in water for section 313 threshold determinations and release reporting. Report as ammonia, CAS number 7664-41-7.

65. Does the qualifier "solution" as used with sodium hydroxide, for example, apply only to aqueous solutions? How would we interpret an aqueous-based slurry such as a drilling mud? What about molten sodium hydroxide?

The qualifier "solution" is not limited to aqueous solutions. For example, petroleum based solutions would also be included. Regarding slurries, NaOH would be dissolved in water in the slurry, and should be considered as a solution. Molten sodium hydroxide is not a solution and is not covered.

C. Chemical-specific Questions

66. Vanadium pentoxide is not explicitedly listed under section 313, although vanadium does appear on the list. Are we correct in assuming that we don't need to report for vanadium pentoxide?

Yes. Vanadium is listed only as a fume or dust under section 313. Therefore, a compound such as vanadium pentoxide is not subject to reporting.

67. For releases of sodium hydroxide (solution) in NPDES effluent discharges within pH 6-9 range, does EPA agree that no reportable amounts are in the pH 6-9 effluent?

Yes, EPA agrees that a neutralized discharge (i.e., with pH between 6-9) contains no reportable amount of sodium hydroxide (solution).

68. Although the category of glycol ethers requires reporting under section 313, I am not clear on whether the simplest glycol ether, diethylene glycol, requires reporting?

Diethylene glycol is not subject to reporting. Glycol ethers, with the following structure, are reportable: $R-(OCH_2CH_2)n-OR'$, where n = 1,2, or 3, R = alkyl or aryl groups, and R' = R,H, or groups which, when removed, yield glycol ethers with the structure: $R-(OCH_2CH_2)n-OH$. R groups for this structure are unsubstituted alkyl or aryl groups. For diethylene glycol, R = hydroxyethyl, and R' = H, and is not subject to reporting under 313.

69. Is dipropylene glycol having the following structure considered a glycol ether for section 313 toxic chemical reporting? $H_3R-(OCH_2OCH)-OR$

Dipropylene glycol is an ether but not a glycol ether since it does not fit the general formula by having an (R-O-C-C-O-R) group in its structure.

70. We manufacture and use copper wire. We also use copper chemicals in various parts of our processes. The section 313 list contains both copper and copper compounds. Should we combine these categories for our determination of thresholds and reporting? Do we report the release of copper compounds as copper metal?

Copper is a separate entry on the section 313 list, and therefore should be tallied separately to determine if you exceed manufacture, process, or use thresholds for copper. Copper compounds are a listed category and will include the aggregate of all copper compounds (other than the metal). For both reports, report releases as copper (e.g., as the copper ion in wastewater) not the total mass of copper compounds released. If you meet the threshold for both, you may file one report for copper compounds that includes copper.

71. I use copper wire in one of my products. I cut it and bend it and then heat seal it into a glass bulb. How do I consider the copper wire for section 313 reporting?

First, the wire would remain an article if no releases of copper (e.g., dusts) occur during manufacture of the glass bulbs. If the wire is not an article, then for an element such as copper, both the metal and its compounds are subject to section 313 reporting. Determine first how it is present in the wire. If it is pure copper wire, the entire weight of the wire must be used. If it is an alloy, the weight percent times the wire weight must be used. If there are copper compounds, the entire compound's weight must be used for threshold determination.

72. Are vinyl chloride, a listed toxic chemical, and polyvinyl chloride, not listed, the same thing?

Polyvinyl chloride is not a listed chemical or a listed synonym of vinyl chloride, and it does not need to be reported. It is a polymer based on the reaction of vinyl chloride. Only "free" vinyl chloride within the polymer should be evaluated for threshold.

73. A facility was advised by one supplier that alumina oxide, CAS number 1344-28-1, is a toxic chemical under section 313 and is therefore reportable. The facility was advised by another supplier that this chemical was on the list in error, and that alumina oxide is not reportable. Is alumina oxide reportable under 313?

Aluminum oxide, CAS number 1344-28-1, is reportable under section 313. Be aware that naturally occurring aluminum oxide, known by the name corundum, has a CAS number of 1302-74-5. Since the list of section 313 chemicals is chemical-specific, corundum is not reportable.

74. Are chemical monomers such as acrylonitrile, butadiene and styrene, which are contained in a plastic co-polymer known as ABS, reportable under section 313? The ABS is in pellet form and melted and molded; therefore, it doesn't meet the article exemption.

If the acrylonitrile, butadiene, and styrene are present in an unreacted form in excess of de minimis concentration then they are reportable. Although those monomers comprise ABS, they are probably in the form of another compound and, therefore, are not reportable under section 313.

75. The CAS number for Di-(2-ethylhexyl) phthalate (DEHP) is listed as 177-81-7 on page 4531 of the February 16, 1988 Federal Register. The CAS number for DEHP is also listed on page 4536 of this Federal Register, but is given as 117-81-7. Which CAS number is the correct one?

The correct CAS number for DEHP is 117-81-7.

76. For section 313 reporting, a catalyst contains 61 percent total nickel, which includes 26 percent free nickel and nickel contained in compounds. Should the threshold determination be based on the 61 percent total Ni?

The 61 percent total nickel cannot be used in the threshold determinations. Nickel compounds are a listed category, therefore the full weight of nickel

compounds must be used in the threshold determination for nickel compounds. A separate threshold determination is required for the free nickel since nickel is also a listed chemical under section 313.

77. Asbestos, with CAS number 1332-21-4, is a listed chemical under 313. The synonym list does not contain reportable asbestos forms. Our facility uses the following forms of asbestos and would like to know if they are reportable: Azbolen (CAS 17068-78-9), Actinolite (CAS 77536-66-4), Amosite (CAS 12172-73-5), Anthropylite (CAS 77536-67-5), Tremolite (CAS 77536-68-6), and Serpentine.

The section 313 listing for asbestos (CAS 1332-21-4) includes the specific forms of asbestos, such as those mentioned above, that have their own individual CAS numbers. Therefore, those types of asbestos are reportable as long as they are in the "friable" form.

78. How is the process of removing asbestos from a site reported?

A facility that manufactures, processes, or otherwise uses friable asbestos in excess of an applicable threshold must report asbestos waste disposal (e.g., accumulated asbestos waste pile disposal requires reporting). But a facility that only "uses" the asbestos (e.g., insulation) is exempt from reporting for structural components of the facility and removing the material does not trigger reporting.

79. Are releases of asbestos from demolition of an old plant reportable?

No.

80. A product is immersed into a plating bath containing nickel chloride (NiCl). This is done to bond nickel to the product prior to distribution in commerce. Nickel is incorporated into the final product (processed) whereas the chloride remains in the plating bath (otherwise used). Since nickel chloride is reportable under the nickel compound category of section 313, which threshold applies for this situation?

The determination is made based on the total amount of nickel chloride processed and the report will be filed for nickel compounds.

81. 53 FR 4538 describes cyanide compounds as X+CN- where X=H+ or any other group where a formal dissociation may occur; examples are KCN and $Ca(CN)_2$. Are cyanide compounds that do not dissociate reportable?

Cyanide compounds that do not dissociate are not reportable. Most of the cyanide compounds that dissociate are cyanide salts which are subject to section 313.

III. MIXTURES AND ALLOYS

82. What is the difference between a mixture and a compound?

When a compound is formed, the identities of the reactant chemicals are lost, but in a mixture, the individual components retain their own identity and could be separated again. For example, polyethylene is a reaction product, not a mixture, and is not subject to reporting under section 313. Steel fabricated into its solid form is considered a mixture because the individual metals retain their chemical identity.

83. When a company has a mixture on-site which does not have its own CAS number, what CAS number should be used?

The company should attempt to identify the listed section 313 chemicals in the mixture. A separate report must be filed for each chemical for which the fraction of the chemical in the mixture multiplied by the total weight of the mixture used or processed exceeds the applicable threshold. The chemicals are treated as if they were present in pure form and each is reported with its CAS number.

84. If a facility only knows the range of concentration of a section 313 chemical in a mixture, are they required to use the upper bound concentration to determine threshold as stated in the Federal Register? Use of the average or midpoint of the range will avoid overestimating emissions. If a metal mixture contains a range of 1 to 10 percent of three metals together, how can this information be used to determine thresholds?

The final rule does not discuss ranges, it only says that the upper bound should be used "if the person knows only the upper bound concentration". If a range is available, using the midpoint or average value is reasonable. For the combination of three chemicals, the facility should split the range among the three chemicals based on the knowledge that they have, so the total equals 10 percent. They do not have to assume 10 percent maximum for each chemical.

85. I run a metal fabrication facility, SIC code 34. If I cut the metal sheets and send the shavings off-site for reuse, can I consider the metal sheets articles?

If the shavings that are formed during the cutting are the sole releases, and if all the shavings are sent off-site for reuse, then the metal sheets are articles and are exempt.

IV. SUPPLIER NOTIFICATION

86. MSDSs for the solvents we use give trade name or generic names only. Do I have to contact the manufacturer for more information to report under Part III of Form R?

If only a trade name or generic name is known and the presence of a section 313 chemical is known, then that can be reported in Part III. Beginning in January 1989, suppliers will be required to provide the identity of the listed chemical (CAS number and chemical name) and concentration in mixtures. The manufacturer may claim the information trade secret, but must provide a name that is descriptive of the chemical and at least an upper bound concentration in the mixture.

87. By what exact date must 1989 mixture notification by suppliers be done?

A supplier must notify each customer with at least the first shipment of the mixture or trade name product in each calendar year beginning January 1, 1989.

88. Is a facility subject to supplier notification requirements if it distributes products containing more than the de minimis level of a listed metal compound?

Yes, if you distribute these products to other manufacturers or processors, and you are in SIC Code 20-39, you may be subject to supplier notification requirements. Articles and consumer products are exempt from supplier notification.

89. Does a supplier have to tell a customer that a section 313 chemical is present below the de minimis level (1.0 percent, or 0.1 percent for OSHA carcinogens)?

No. Such information is not required.

90. Is supplier notification required for distributors in Standard Industrial Classification (SIC) code 51 which do not manufacture or process any listed toxic chemicals for mixtures containing toxic chemicals?

Distributors in SIC code 51 which do not manufacture or process a toxic chemical are not required to prepare notice that the mixture or trade name products which they distribute contain a toxic chemical. They should, however, pass along such notices prepared by their supplier to anyone who purchases a mixture or trade name product containing a toxic chemical.

91. I am a small chemical company who supplies some section 313 toxic chemicals to customers. My customers are requesting MSDS information and want the CAS number for every chemical in my mixtures. I thought I only had to supply that information for the listed toxic chemicals.

If you wish, you may provide them with the CAS numbers for all of the chemicals in your mixtures, but you are only required to provide information on the listed toxic chemicals (i.e., those chemicals subject to reporting under section 313).

92. How will the supplier notification work for imported products -- do exporters from Japan have to comply?

No. Foreign suppliers are not required to comply with supplier notification. However, we strongly encourage importers to request content and composition data on imported mixtures. EPA will also be exploring means of voluntary notification by foreign suppliers.

93. Is supplier notification required from a manufacturer of a toxic chemical in SIC codes 20 through 39 which sells a waste mixture containing a toxic chemical off-site to a recycling or recovery facility that is covered by section 313?

Yes, because the toxic chemical is sold to the recycler it is the equivalent of selling a product and notification is required. The notice the facility would be required to give is the percentage and identity of the toxic chemical in the mixture that is sent to the recycling or recovery facility. If the material is, however, sent off-site as a waste for the treatment or disposal, then no supplier notification is required.

94. A facility sends empty drums containing toxic chemicals residue to a drum recycler (within SIC Code 20-39.) Must the facility provide a supplier notification?

No, the supplier notification requirement only applies to products that are supplied or distributed. The only chemicals being transferred are in the form of waste and the supplier notification does not apply to waste.

V. ACTIVITIES AND USES OF THE CHEMICAL AT THE FACILITY

95. Are the thresholds for manufacture and process considered separately? That is, if one manufacturers 49,000 pounds of chemical A and processes 49,000 pounds of chemical A, does chemical A need to be reported?

Thresholds are considered separately for manufacture, process, or use of the same chemical. Therefore, chemical A would not have to be reported for the 1988 reporting year. However, reporting would be required for 1989 when the threshold decreases to 25,000 pounds.

96. Are materials in inventory (i.e., amounts on hand at year end) to be factored into threshold determinations?

No. Only quantities of a chemical actually manufactured (including imported), processed, or "otherwise used" during the calendar year are to be counted toward a threshold.

97. Under manufacture/import, what constitutes import? Does the threshold apply if you have a broker who imports the chemical for you, stores for you, and then ships to you? What criteria apply?

Use of a broker does not negate facility "importation" of a covered chemical. If your facility specified that a listed chemical or mixture be obtained from a foreign source and you specified the amount, then your facility "imported" the chemical. The criteria are that you caused the chemical to be brought into the customs territory of the U.S. and you "control the identity of the chemical and the amount to be imported."

98. Do chemicals produced coincidentally to manufacturing, processing, or using other chemical substances have to be reported?

Chemicals produced coincidentally are subject to reporting. In the case of coincidental production of an impurity, however, the de minimis limitation applies. An impurity is the residual amount of chemical remaining in a final product for distribution in commerce.

99. How can wastewater treatment "products" be considered as manufactured from a treatment process?

The rule's definition of "manufacture" includes the coincidental generation of a listed toxic chemical as a consequence of the facility's waste treatment or disposal activities. These chemicals may not be produced for commercial purposes. They are, nevertheless, created as a result of the facilities activities and released to the environment must be accounted for.

100. A facility adds hydrochloric acid and sodium hydroxide to waste water to neutralize the waste water prior to discharge. Are these activities manufacturing or processing (with thresholds of 50,000 pounds), or are these chemicals "otherwise used" with thresholds of 10,000 pounds each?

The hydrochloric acid and sodium hydroxide are "otherwise used" with thresholds of 10,000 pounds each.

101. A facility draws steel rods into a smaller diameter. Is this manufacture, process or otherwise use? How do I report?

This is processing and only the toxic chemicals in the steel rods actually processed need to be included toward the threshold. Report for the total amount of each chemical in the rods.

102. A facility manufactures fire fighting and fire protection equipment. The facility has a training school on how to use that equipment. As part of the training school, on-site fires are set using gasoline containing benzene, a toxic chemical. For section 313 threshold determination, would this be an "otherwise use" of benzene, or would this use be exempt as product testing?

This would be considered otherwise used for the section 313 threshold determination, since the benzene is being used in a non-incorporative activity in order to train individuals to use a product. Training is not considered product testing or research and development.

103. We are taking part in an experimental shale oil extraction process. When the shale is extracted, concentrations of a toxic chemical are present in trace amounts far below the de minimis concentration. It probably would never trigger the threshold, but can it be considered an impurity or is it a byproduct?

The de minimis exemption applies to the toxic chemical present in the shale.

104. What is the difference between a manufacturing aid and processing aid?

A chemical processing aid is added directly to the reaction mixture to aid in processing and does not intentionally remain in the product. Examples include catalysts, solvents, and buffers. A manufacturing aid helps to run the equipment and is never incorporated into the product. Examples include lubricants, coolants, and refrigerants.

105. We have purchased in excess of 100,000 pounds of aluminum material in block form to make a mold which stays on site. When making the mold, fumes and dust are a byproduct. Do we report aluminum as the chemical?

Aluminum appears on the list of chemicals as "aluminum (fume or dust)". You must determine if you manufacture, process, or use aluminum fume or dust. In this case, you are not processing or using, but do "manufacture" aluminum fume or dust coincidentally as a byproduct of making molds. Therefore, you must report for aluminum (fume or dust) if you exceed the threshold.

106. A facility melts aluminum ingots, reshapes them, and injects them into a die to form parts. Does the 50,000 pounds processing threshold apply to the amount of molten aluminum processed?

For calendar year 1988, 50,000 pounds threshold applies to the amount of aluminum fume or dust generated at the facility, not the aluminum in molten (liquid) or solid form. Therefore, the facility must determine whether they produce more than 50,000 pounds of aluminum fume or dust air emissions in their processing operation.

107. A facility in the textile industry buys ammonium sulfate in dry form and then makes a solution by adding water. The solution is then "otherwise used" at the facility. Are they manufacturing ammonium sulfate solution and subject to the 50,000 pound threshold, or does the 10,000 pound use threshold apply?

They are both manufacturing and using the solution and should indicate both activities on the form. If the facility uses in excess of 10,000 pounds of ammonium sulfate (solution), then reporting is triggered. Remember that if you must report for any reason you must report all activities involving the chemical.

108. A remanufacturer of auto engines cleans the engine parts and thereby produces a lead-containing waste (from gasoline lead deposits). Are they a manufacturer, processor, or user of lead compounds?

The facility neither manufactures, processes, nor otherwise uses lead. Lead is not incorporated into products for distribution nor is it a manufacturing aid or a processing aid as those terms are defined. Lead in the waste would not be included for threshold determination.

109. What's the difference between "process" and "otherwise use"?

"Process" implies incorporation; the chemical added is intended to become part of a product distributed in commerce. "Otherwise use" implies non-incorporation; the chemical is not intended to become part of a product.

110. If a solvent is used in a process and 85 percent evaporates but 15 percent stays with product, is this process or use? The 15 percent was not necessarily intended to stay with product.

In this case, the entire quantity of the solvent should be considered "otherwise used" and subject to the 10,000 pound threshold. If the solvent was intended to remain in the product, this would be processing.

111. Is soldering light bulbs using lead solder considered processing of the solder?

Yes, it incorporates the solder into a product for distribution in commerce.

112. An electroplating facility uses metal cyanide compounds in their electroplating operations. Are they processing or using those cyanide compounds, and how do they determine whether they meet the threshold and which threshold applies?

The parent metal from the metal cyanide compound is plated onto a substrate electrochemically, leaving the cyanide as waste product. The parent metal is "processed", while the cyanide is "otherwise used". Metal cyanides are reportable under section 313 as both cyanide compounds and metal cyanides. Select the threshold based on the action that involves the portion of the compound that identifies the category (i.e., cyanide for cyanide compounds). The total weight of the compound counts for both the metal threshold and the cyanide threshold.

113. A facility uses sulfuric acid to etch chips, then neutralizes with ammonia forming ammonium sulfate. Which thresholds apply to each chemical? A facility uses sodium hydroxide solution in a scrubber to control fluoride emissions. Which activity and threshold applies to the sodium hydroxide?

Chemicals not incorporated into a product for distribution in commerce are otherwise used. A 10,000 pound threshold applies to the sulfuric acid, ammonia, and sodium hydroxide if the byproducts are not sold. The 50,000 pound manufacturing threshold applies to ammonium sulfate because it is manufactured coincidentally as a result of the neutralization process.

114. Does the placing of a bulk liquid containing a small percentage of a section 313 chemical into small bottles for consumer sale constitute a "use" of the mixture?

No, but it is a type of "processing." If the bulk liquid contains a section 313 covered chemical in excess of the de minimis level, the chemical in the liquid would have to be factored into calculations in determining whether the processing threshold is exceeded for that chemical.

115. Paint containing listed chemicals is applied to a product and becomes part of the article. Does the 50,000 pound threshold apply? What about the volatile chemicals from the painting operation -- are they "otherwise used," thus subject to the 10,000 pound threshold?

Yes to both questions. This is a case in which listed chemicals in the same mixture may have different thresholds. The listed chemicals that remain as part of the coating are "processed," whereas the volatile solvents in the paint are "used" because they are not intended to be incorporated into the article.

116. A facility removes chemicals from groundwater in a cleanup action. The listed chemicals, after treatment, are sent off-site for disposal. Are they required to report? Does the exemption for intake water apply?

Since the chemicals are not manufactured, processed, or otherwise used, no reporting threshold applies to the cleanup action. If the chemicals are manufactured, processed, or otherwise used elsewhere at the facility and exceed a threshold, releases from the cleanup must also be reported on the form. Intake water exemption does not apply since the chemicals are not being used in process water or noncontact cooling water.

117. For section 313 reporting, are PCBs contained in transformers that leak reportable as "otherwise use" of PCBs?

Yes, if the transformer is leaking, then it is no longer considered an article; therefore it would be reportable if the 10,000 pound threshold for "otherwise use" is exceeded.

118. A covered facility includes an agricultural establishment that use pesticides to spray crops. The pesticides contain toxic chemicals subject to section 313 reporting. Is the pesticide considered "otherwise used"?

Use of the chemicals in pesticides is considered "otherwise used" and the entire amount is reported as a release.

VI. EXEMPTIONS

A. General, Personal Use, and Intake Water or Air

119. Does a material retain its exemption even if other formulations, articles, or fuels with the same chemical are not exempt?

Yes, the material retains its exemption.

120. Do office supply type products require coverage under section 313 reporting?

EPA does not intend to require covered facilities to account for listed chemicals in office supplies such as correction fluid and copier machine fluids. Although not specifically exempt in the regulation, EPA interprets such mixtures or products to be equivalent to personal use items or materials present in a facility's cafeteria, infirmary, or materials used for routine janitorial activities and facility grounds maintenance.

121. A facility uses river water as process water. The water taken from the river contains more lead (1.0 ppb) than the water returned to the river (0.5 ppb). Is it subject to the process water exemption? If not, is the facility treating the water?

The process water can be considered exempt because the toxic chemical was present as drawn from the environment (Section 372.38 (c)(5)).

122. Would a listed chemical present in compressed air be exempt? What if the chemical is present in boiler emission air?

A listed chemical present in compressed air would not have to be counted toward a threshold determination. If that same chemical is present in the boiler emission air only because it was in the compressed air fed to the boiler, then that would remain an exempt use. However, if the chemical is created as a result of combustion, you have coincidentally manufactured the chemical and must consider it for reporting.

123. A facility pumps naturally occurring sodium sulfate brine solution from the ground, processes it to produce solid sodium sulfate, and returns the solution water to the brine reservoir. They do not pump other water into the formation to dissolve sodium sulfate. Are they exempt due to "chemical in incoming process water?" If not, how do they report the "release" of sodium sulfate in water returned to the brine reservoir?

They are NOT exempt because they are processing brine for its sodium sulfate content, not using process water that happens to contain an impurity. They should not report underground injection or similar disposal for water returned to the reservoir since the net effect of the operation is to remove sodium sulfate. Recovering sodium sulfate is not "waste treatment", however, any other releases or treatment should be reported.

B. Facility Maintenance and Structural Components

124. How is routine maintenance defined in the exemption list? Is equipment maintenance included?

Equipment maintenance is not exempt. The routine maintenance exemption is intended to cover janitorial or other custodial or plant grounds maintenance activities using such substances as bathroom cleaners, or fertilizers and pesticides used to maintain lawns, in the same form and concentration commonly distributed to consumers. Painting of equipment is exempt because it is intended to become part of the structure of the facility.

125. Are solvents and other listed chemicals in paint used to maintain a facility exempt?

Yes. Painting to maintain the physical integrity of the facility is consistent with the "structural component" exemptions, even though the solvents in the paint don't become part of the structure.

126. Does the "structural component" exemption cover the small amounts of abraded/corroded metals from pipes and other facility equipment that become part of process streams?

Yes.

127. If a facility stores a toxic chemical on-site, and then uses it by installing it in the facility (i.e., copper pipes) is the facility required to consider the toxic chemical (a component) for section 313 submission?

If the chemical is in an article (i.e. copper pipe) it is not considered in threshold determinations. When the substance is installed, it then falls under the structural component exemption and is exempt.

128. Are pesticides which are used to control algae in cooling water towers exempt?

No, such pesticides would not fit the routine maintenance exemption. The "otherwise use" threshold would apply.

129. Are degreasers used in plant maintenance shops exempt?

No, using degreasers would be considered "otherwise used."

C. Vehicle Maintenance

130. Please verify that any motorized vehicle operated by the facility, whether licensed or not, is subject to the exemption listed in section 372.38. This includes forklifts, tow motors, automobiles, etc., that contain a motor. Also, please verify that gasoline, lubricants, oils, and anti-freeze are all considered to be substances subject to this exemption.

Yes. The exemption includes benzene in gasoline and glycol ether in antifreeze used to maintain and operate a facility motor vehicle. This exemption would not apply, however, in the case of an automobile manufacturing plant. As part of the production of vehicles, such a facility would be incorporating the chemicals into an article for distribution in commerce.

131. In the process of maintaining fork lift truck batteries, they are opened to add sulfuric acid as needed. Is this sulfuric acid reportable under section 313?

No. Section 313 exempts the "use of products containing toxic chemicals for the purpose of maintaining motor vehicles operated by the facility" (40 CFR Part 372.38). That amount would not be included in the threshold determination.

D. Laboratories

132. Does section 313 reporting include laboratory chemicals?

The quantity of a listed chemical manufactured, processed, or "otherwise used" in a laboratory under the supervision of a technically qualified person is exempt from threshold and release calculations. This exemption includes laboratories performing quality control activities and those located in manufacturing facilities.

133. What is meant by "specialty chemical production" as an exception to the laboratory activities exemption?

Specialty chemical production refers to chemicals produced in a laboratory setting that are distributed in commerce.

134. Assume that a quality control laboratory, or area control laboratory, is part of a manufacturing facility. Would it be exempt from calculating threshold quantities for listed chemicals?

Yes, assuming that such a laboratory is under the supervision of a technically qualified person and is not engaged in pilot plant scale or specialty chemical production.

135. A facility sends materials which are sampled from processing operations to a laboratory for quality control purposes. Are these quantities exempted under the laboratory exemption, provided that they are handled by a technically qualified individual?

No, any quantity of a covered chemical manufactured, processed, or "otherwise used" must be counted for the purpose of threshold determination. The fact that it is drawn from a process for purposes of quality control testing does not allow the facility to subtract that quantity from the total amount of the chemical factored into the threshold determinations.

136. Is a bench scale or pilot scale reactor for a pilot plant excluded from the laboratory exemption?

A bench scale reactor would not be exempted as part of the pilot plant if it is used to make products (in quantities above the threshold) distributed in commerce.

137. Are the following engine testing operations that use listed section 313 chemicals exempt under the laboratory activities exemption: (a) testing of production engines intended for sale in specialized engine test cells; (b) testing engines for research and development purposes in specialized engine test cells; (c) testing for research and development purposes in open water bodies?

Yes, all of the noted operations are considered "product testing" and as such are intended to be included under the laboratory activities exemption.

138. Section 372.38 lists uses of chemicals in laboratories which are exempt from threshold determination and release reporting. It states, "if a toxic chemical is manufactured, processed, or otherwise used in a laboratory at a covered facility under the supervision of a technically qualified individual, as defined in Section 720.3(ee) of this title," it is excluded from 313 reporting requirements. What is that reference?

Section 720.3(ee) is found in Toxic Substances Control Act (TSCA) regulations (40 CFR 720.3(ee)) and defines "technically qualified individual" as "a person or persons who, because of education, training or experience, or a combination of these factors, is capable of understanding" and minimizing risks associated with the substance, and is responsible for safe procurement, storage, use, and disposal within the scope of research.

E. De Minimis

139. What is "de minimis" under Section 313?

De minimis refers to a concentration of the chemical so low that reporting is not required. It does not apply to wastestreams, but applies to products purchased, sold, or commercially used by the facility.

140. Please explain the de minimis limitation for mixtures and trade name products.

Listed toxic chemicals present in mixtures or trade name products at concentrations below the de minimis level of 1.0 percent, or 0.1 percent for OSHA-defined carcinogens, do not have to be factored into threshold or release determinations. This de minimis level is consistent with the OSHA Hazard Communication Standard requirements for development of Material Safety Data Sheets (MSDSs).

141. Does the de minimis exemption apply regardless of whether a chemical is present as an ingredient, an impurity, or in a waste?

The de minimis exemption applies to ingredients of mixtures or to impurities present in products you process or use. It does not apply to wastes when you manufacture, process or use chemicals in mixtures above the de minimis level (and meet the threshold), wastes and releases must be reported regardless of concentration. Further, when your operations create (manufacture) the chemical in waste treatment, the de minimis exemption does not apply.

142. What does OSHA consider as a carcinogen under the hazard communication standard? Does a potential carcinogen need to be included under this definition?

According to OSHA's definition: "a chemical is a carcinogen or potential carcinogen for hazard communication purposes" if it is found on any of three lists: (1) the National Toxicological Program, Annual report on Carcinogens; (2) the International Agency for Research on Cancer (IARC) Monographs; or (3) 29 CFR Part 1910, Subpart 2, OSHA Toxic and Hazardous Substances. Both actual and potential carcinogens are included under OSHA's definition.

143. How do we determine whether the de minimis level for a section 313 listed chemical should be 1 percent or 0.1 percent?

The instructions for completing Form R for 1988 contains a list of covered toxic chemicals with the de minimis level for each.

144. A facility uses a chemical mixture that contains a toxic chemical. If the maximum and minimum concentrations listed on the MSDS range above and below the de minimis concentration levels, how can the facility determine quantities for section 313 compliance?

The amount of the chemical in the mixture that is present above the de minimis level and therefore counts toward the threshold, can be assumed to be proportional to the ratio of the above-de minimis concentration range to the overall concentration range. The concentration of the chemical in the mixture that is not exempt is the average of the de minimis and the maximum concentration.

145. A raw material contains less than the de minimis level of a listed chemical. During processing, the chemical is concentrated to above the de minimis level in a solid waste that is disposed in an on-site landfill. Should the chemical handled in the process line be included in the facility threshold determination? Do releases from the process line or wastestreams containing above the de minimis level require reporting?

The de minimis exemption applies to the raw material. You do not have to consider it further even if a toxic chemical is concentrated above the de minimis level in a waste.

F. Articles

146. Are metal "articles" exempt from threshold determinations in normal processing, use, or disposal?

Metal "articles" are exempt from threshold determinations if, during their normal processing or use no toxic chemical is released. Disposal of solid wastes that are recognizable as the processed article is not a release that negates the article status.

147. Does the article exemption in the 313 rule apply to preparation of the article? What about processing or using that article?

The article exemption does not apply to the processing of chemicals to make articles. Manufacturing of articles such as tableware is not exempt. When a facility manufactures a metal part and coats it, neither process is exempt.

148. We take copper wire, cut it, and wind it around smaller spools. Is the wire still an article?

If there is no release of a toxic chemical during normal processing of the copper wire, then the wire remains an article.

149. Can facilities who extrude copper bars or rods into wire treat the bar or rod as an article?

No, an article has end use functions dependent in whole or in part upon its shape or design during end use. The end use function is dependent upon the copper being in the shape of the wire, so the copper bar cannot be considered an article. If you are changing the shape or form of an item substantially, you are processing the chemicals -- they are not articles.

150. A facility uses a product that is in pellet form in its manufacturing operations. Is this product considered an article and therefore exempt from reporting under section 313?

A pelletized product is not an article. If it is a chemical or mixture that is in a pelletized form because such form is convenient for further processing by the facility or its customers, then the pellet is not an article. The amount of a toxic chemical in the pellets would have to be reported as a transfer to an off-site location if, for example, floor sweepings were sent as part of refuse to a land fill.

151. A facility uses PCB transformers. Are these considered to be articles, and therefore exempt from reporting under section 313?

PCB transformers are considered to be articles, as long as they do not release PCBs during normal use or if the facility does not service the transformer by replacing the fluid with other PCB containing fluid.

152. A facility (ship builder) uses lead bricks in ships as ballast. They remain permanently with the ship. The lead bricks could be considered articles and therefore be exempt from reporting. However, they infrequently cut some of the bricks, generating lead dust, which they collect and send to

an off-site lead reprocessor. How should they report? What should be counted towards the threshold if they are not considered articles?

If all of the lead solid waste is recycled (i.e., none released to air) then no "release" occurs. Shipment off-site for recycle does not have to be reported. Therefore, the cut bricks retain their article status. If emissions of lead occur that are not recycled, then the cut bricks would not be considered articles. In the non-article case, only count the lead in bricks actually "processed" (i.e., cut) toward the threshold. Account for lead not recycled as lead released.

VII. RELEASES OF THE CHEMICAL

153. What is the definition of a chemical "release" under section 313?

The law defines a release as any "spilling, leaking, pumping, pouring, emitting, emptying, discharging, injecting, escaping, leaching, dumping, or disposing to the environment". Under section 313, facilities are required to take into account in their reports both "routine" and "accidental" releases to any environmental medium.

154. Is the disposal of wastes such as dusts, shavings, or turnings -- that result from grinding or drilling of metal items -- considered releases of toxic chemicals?

Yes, such releases of "non-recognizable" solid wastes such as dusts, shavings, or turnings are considered releases of toxic chemicals.

155. Tank trucks and rail cars physically enter a facility. While loading, emissions occur. Are these emissions subject to reporting under section 313?

Because the loading and the releases occur within the facility boundary, the releases must be reported.

156. Do we need to report leaking, abandoned landfills? What if we don't know if it is leaking?

Leaks from landfills need not be reported. EPA requires reporting of the amount of a chemical placed in an on-site landfill during the year. It is not necessary to estimate migration from the landfill.

157. I process a plastic pipe which is 3 percent formaldehyde. I also know how much formaldehyde is emitted when I process the pipe. Do I need to report these emissions?

Yes, if the processing threshold for formaldehyde is exceeded.

158. A facility buys and sells rigid polyurethane foam insulation containing a fluorocarbon. If the fluorocarbon is Freon 113, would they have to report the Freon 113 released to the air when they cut the insulation?

Freon 113 is a frothing agent to produce rigid polyurethane foam and is intended to remain in the foam cells to give it density and insulating value. Foam containing higher than the de minimis concentration of Freon 113 that is cut, releasing the chemical, cannot be considered an article. The Freon 113 in cut foam pieces counts toward the processing threshold and if the threshold is met, the facility must report the chemical released when the insulation is cut. Normal/natural diffusion of Freon 113 from the foam does not have to be considered a release.

159. Our facility paints metal cabinets and the paint solvents contain a listed toxic chemical. The system consists of a closed vacuum vented painting room and a closed oven room vented by an oven stack. Is the vent to the outside of the building over the painting room a "releases from building ventilation systems" fugitive emission?

No, fugitive releases are emissions that are not in a confined directional air flow. Since your building vent system over the painting room is a confined air stream, it can be combined with the oven stack as a stack or point emission for Form R, Section 5.2.

160. A facility has a liquid wastestream which is incinerated. The incineration is 99.9 percent effective and it is no longer a liquid wastestream. However, the 0.1 percent is released to air as a gaseous wastestream. Does the facility not need to report this wastestream?

The facility does not need to report a gaseous wastestream. The liquid wastestream is 100 percent treated through incineration. The air emissions created, if any, would be reported as a release to air and the quantity would be included in Part III, Section 5.2, stack or point air emissions. If the air emission is further treated then that air emission would be listed as a gaseous wastestream and the treatment documented in Part III, Section 7.

161. Where does one report routine leaks from pipes? Would you report as disposal to land or underground injection?

Reporting leaks from pipes requires determining where the released material goes. A material that evaporates would be reported as a fugitive air emission. A nonvolatile material leaking onto land, or any material leaking from an underground pipe, would be reported as a release to land, entering the amount in Section 5.5.4, Other disposal. Material that is cleaned up might be reported as a release to water or an off-site transfer, and would be included in the appropriate section of the form.

162. A 313 substance is emitted as an air particulate which deposits on the facility grounds or roof, such that it will be washed into a NPDES pond or swept into a solid waste pit for landfill. Will the release be reported as a release to land or water, but not air? This would prevent a substance from being reported twice, once as an air emission, and once as a water/land emission.

If the facility can develop a supportable estimate that part of a release to air is deposited within the facility (and subsequently collected or deposited in an on-site landfill or surface impoundment), then these quantities can be separated from the air release figure(s) and reported as released to land (on-site). The remaining air releases, not deposited on the facility, would be reported as releases to air.

163. Is it true that the facility need not make any special effort to measure or monitor releases for section 313 reporting and may use information that is on hand? If this is true, how will section 313 reporting produce complete data for the public on environmental releases?

The law states that covered facilities need not conduct monitoring or other activities beyond that required by other statutory or regulatory requirements. Congress included this language to limit the burden on the affected industry for development of release and other required data. Without measurement or monitoring data, the facility is required to make reasonable estimates.

164. Section 313(g)(2) of the statute states that the owner or operator of a facility may use readily available data (not must use). In some cases, the available data may be known to be non-representative and reasonable estimates offer more accurate release information. Would EPA, in this instance, favor use of the estimates rather than data?

Yes, it is preferable to use reasonable estimates if monitoring data is known to be non-representative.

165. Don't the section 313 reporting requirements overlook the possibility that a substance can lose its identity as a side product in a reaction, and that the difference between "input and output" volumes may not always be due to a release?

The section 313 rule does recognize that a chemical can lose its identity in a reaction. Determining or reporting total mass balance accounting, total annual production, initial annual inventory, or amounts processed or used are not required. The rule requires an estimate of the total annual amount of a chemical released to the environment and the maximum quantity on-site at any time during the year.

166. If a facility monitors for a chemical and the measurement is below the limit of detection of the method, can they report zero releases?

Although monitoring results may be below detectable limits, this does not mean that the chemical is not present. The facility must use reasonable judgment as to the presence and amount of the chemical; one approach is to use half the detection limit as the wastestream concentration. The facility should not estimate releases based solely on monitoring devices, but also on their knowledge of specific conditions at the plant.

167. If a company measures its own leaks (valve, flange, pump, etc.) and determines a new fugitive factor, is this code "E" or "M" or "O"?

Use the code "M" if you measured releases of the chemical from your equipment at the facility. Use "E" only for published emission factors which are chemical specific. Use "O" if you measured leaks generally or applied non-published factors developed at other facilities.

168. If total releases are obtained using combination of basis, how do we report "Basis of Estimate" in Section 5, Column B?

Report the basis used to calculate the major portion of each release entry. See the examples in the instructions to the form.

169. Are SOCMI (Synthetic Organic Chemicals Manufacturing Industry) emission factors applicable to the petroleum refining industry as well as organic chemical manufacturers?

Yes, SOCMI fugitive emission factors can be used for the petroleum refining industry even though they are based upon synthetic organic manufacturing. The refinery user would have to correct for differences in concentrations of the mixtures, because SOCMI factors are based upon pure substances being released.

170. EPA's fugitive emission factors for equipment leaks for the Synthetic Organic Chemical Manufacturing Industry (SOCMI) and some air emissions factors listed in EPA's document AP-42, "Compilation of Air Pollutant Emission Factors," are not chemical specific. Should the basis of estimate code be entered as "E" or "O"?

Use "O" for non-chemical-specific emission factors.

171. Should we report the composition of stormwater as it falls from the sky -- or do we count its composition once the rainwater has run onto and off soil?

You count the composition once the rainwater has run onto and off the soil, equipment, concrete pads, etc. as a portion of the total facility release to surface water.

172. A facility processes anhydrous ammonia. "Low concentrations" of ammonia, ammonium hydroxide, ammonium chloride, and other ammonia salts are released into a wastestream that is not treated but is deep well injected. Is the facility required to report releases of ammonia?

The facility should count the quantity of ammonia (i.e., "free" ammonia) as the amount released to the wastestream. In-stream conversions do not negate the fact that ammonia, as a listed chemical, is released.

173. How does one use the storage tank equations in Appendix C of the technical guidance to estimate air emissions for a specific chemical in a liquid mixture?

You must estimate emissions of the total mixture using average molecular weight and vapor pressure for the mixture, then multiply by the weight fraction of the chemical in the gaseous emission. The required formulas are found in the technical guidance but are not listed in a step-by-step procedure.

174. The emission factors used to estimate releases to air from leaks in pipes are time dependent. What amount of time should be used to determine fugitive emissions from emission factors?

In using emission factors to determine fugitive emissions to the air from leaks in pipes, a facility must use the total amount of time which a pipe

contains the toxic chemical, since a release will occur whether a chemical is moving or stagnant in the pipe.

175. How does a facility estimate fugitive or working losses from drums contained in a warehouse or storage facility?

Fugitive emissions from drums in storage at a covered facility may include emissions from opening and emptying the drums. The facility may consider each drum as a small tank and estimate the amount of toxic chemical contained in the vapor space using methods such as partial pressure determinations found in the technical guidance document.

176. Is there any recommended approach for estimating emissions from facilities whose raw material is of a constantly varying and unknown composition. For example, tar plants receive crude coal tar in batches. No analysis is done on incoming raw materials or on products (or on intermediates) at such facilities.

If available, data on the average composition for the specific material or published data on similar substances should be used.

177. If off-site reclaimers are not to be included in the off-site locations which handle wastes, are emissions discharged by these reclaimers included as point emissions or are they not reported?

A facility should report neither transfers for off-site recycling of the chemical nor the chemical releases from such a reclaimer.

178. If the calculated threshold of sodium hydroxide, for example, is based on the mass utilization of the solution, would the emission of a wastewater stream containing 1 ppm of NaOH be the actual mass of NaOH or the mass of wastewater?

Only the actual mass of the toxic chemical being released should be reported, in this case the mass of sodium hydroxide. Note, however, that in this specific case, if the wastestream has been neutralized so that the pH is in the range 6-9, the release of sodium hydroxide would be zero for reporting purposes.

179. We manufacture paint and one of the chemicals we use is toluene. We used the "Estimating Releases" guidance document but the answer is for toluene and mineral spirits and is much too high. Can we use the 6 percent present in the paint mixture times the number and report that?

The partial vapor pressure of toluene in formulations, which is a function of its vapor fraction and mole fraction (not weight percent), can be used. See Appendix C, Note (1), p. C-6 of Estimating Releases and Waste Treatment Efficiencies for the Toxic Chemical Release Inventory Form, EPA document 560/4-88-002.

180. How should a facility estimate emissions from horizontal storage tanks? The AP-42 equations were developed for vertical tanks.

For fixed roof tanks, the working loss equation for vertical tanks can be used. For breathing losses, one can still use the vertical tank equation, except that an effective tank diameter must be substituted for D in the equation. D is the square root of {(4)(area of liquid surface)}/3.14. H is the same as for vertical tanks.

181. How can one estimate emissions of chlorine from use in cooling water treatment? We have tried to estimate the emissions for some cooling water systems based on the amount of water evaporation, wind drift, and the amount of chlorine used, but the releases seem too high.

Estimating emissions based on the amount used overestimates release since: chlorine is only slightly soluble in water, reacts with chemicals in the water, and dissipates in side reactions. Measured residual chlorine times recirculation rate times lost water fraction may also overestimate release (residual includes other forms of chlorine), but may be the only way to make a reasonable estimate. There are no readily available emission data on chlorine from cooling water systems.

182. If H_2SO_4/HCl (sulfuric acid/ hydrochloric acid) were spilled outside a facility and an absorbent (e.g., kitty litter) was used to absorb the toxic chemicals, would the use of the absorbent be listed as a treatment and be reported under Section 7?

No, the use of the absorbent would not be considered a treatment. Only if the acids were neutralized would that activity be considered treatment. If the absorbent were drummed and sent to a landfill, that would be listed as a transfer to an off-site location. Any acid left on the ground must be accounted for as a release to land.

183. Form R requires estimates of the release to the environment of chemicals in specific release categories. If a facility is unable to complete its estimate of these releases by the deadline, should the company leave that entry blank and promise a future estimate, or make the best estimate possible and submit later revisions?

Any covered facility must report by July 1, and the data provided should be the best estimate using the best data available; records supporting the data must be kept for three years. If more accurate data are developed, the facility may submit revised forms. EPA can take enforcement action if they believe that the data do not represent reasonable estimates.

184. For releases or transfers off-site that are reported as zero, what should be reported as a basis of estimate?

Leave the basis of estimate box blank or enter N/A.

185. Explain the naming of receiving streams.

You are required to report the name of each stream "to which chemicals being reported are directly discharged". If you have no such discharge, enter "N/A".

186. A facility determines that it can estimate stormwater releases of a listed chemical from the facility. However, such releases go to a city-owned storm sewer system and the facility has no direct knowledge of the receiving stream or surface water body to which the chemical is ultimately released. What do they report as the "receiving stream" on Part I, Section 3.10(a) of the form?

The facility would put "city-owned storm sewer" or the equivalent because this is all they know. To leave the receiving stream item blank or put N/A would be identified as an error when the form is entered to the computerized database of section 313 data.

187. If a facility has a cement lining or other leak restricting device in the area where they store toxic chemical containers and a release from the stored chemicals occurs, how is this reported in Section III?

If the facility does not have specific measures for land filling, land farming, or land disposal, then for the purposes of Form R Section III the releases would be entered to 5.5.4, Other Disposal. This would apply to amounts released that were not "cleaned up" and removed from the site or otherwise treated and disposed on-site.

188. If a POTW has no current estimate of treatment efficiency for each section 313 chemical, is "N/A" acceptable?

You need not report the treatment efficiency for any off-site facility to which transfers of toxic chemicals occur. Thus, facilities must account for the annual quantity of the listed toxic chemical(s) released to a POTW, but are not required to estimate the treatment efficiency of the POTW.

189. What are the technical guidance manuals for specific industries?

These documents help specific industries or operations to determine reporting requirements and estimate releases. They cover: electroplating; semiconductors; textile dyeing; wood products manufacture and preservation; organic coatings application; rubber production; printing; paper and paperboard; leather tanning; monofilament fiber manufacture; formulating aqueous solutions.

190. Why are the range codes grouped together in logarithmic scale?

For quantities on-site, the ranges were patterned after TSCA inventory reporting as suggested by Congress.

VIII. WASTE TREATMENT METHODS AND EFFICIENCY

191. Does the waste treatment section apply only to the facility completing the report?

Yes.

192. Where multiple sources are combined for treatment, should each source be listed in the treatment efficiencies section and a common efficiency shown or should only the combined stream be shown?

Report only the combined (or aggregate) wastestream and report the treatment and its efficiency. However, a wastestream that is treated before combination with other wastes, which are then subsequently treated, should be reported on a separate line.

193. A facility has a sequential treatment process in which the influent concentration and treatment efficiency for each step is known. How should they report on the form?

The facility may report in either of two ways. (1) Report influent concentration for the first step and report overall treatment efficiency for the process as per instructions. Check the sequential treatment for each step. (2) Report each influent concentration and efficiency for each step. Do not check sequential treatment boxes, as this will create confusion as to the meaning of the efficiency listed by the last treatment step.

194. If a wastewater treatment system contains an oil skimmer or other phase separation treatment, is this reported as a sequential treatment step for each of the separated phases, or just for one phase?

The separation step is a sequential treatment step for one liquid phase (the one with the larger volume, in this case, water). The other phase must be considered a new wastestream and must be listed separately on the form if treated subsequent to its separation.

195. We send our sludge to a biological treatment device on-site. The microbes in the system exist in a buffered solution. As a result, the toxic chemical (a mineral acid) in the sludge is neutralized (pH 7.3). How do I account for biological and neutralization treatment in one process in Part III Section 7? After that, the waste goes to settling ponds where solids settle out. Is this also a sequential treatment step?

List the biological treatment first with a zero efficiency because it does nothing to the toxic chemical. Enter the neutralization treatment with a 100 percent efficiency since pH 7.3 is considered complete neutralization for an acid. Check the sequential treatment box. As for the settling ponds, the toxic chemical ceased to exist upon complete neutralization, so this step does not need to be included on the form for mineral acid.

196. On-site wastewater treatment plant sludges which may contain trace amounts of section 313 chemicals are composted on-site. The finished compost is then used as daily cover for the on-site sanitary landfill and for landscaping around the site. Is this considered land treatment, land impoundment, or not a release?

It is a release and the code D03 for Land Treatment/Application/Farming should be entered in Part III, Section 7B of the form.

197. We have two waste streams, one contains NaOH and the other HCl. These streams are combined for neutralization; they then stay in the settling pond until the solid settles out. The water is sent to a POTW, the solid to a landfill. I know that we meet thresholds and must file reports for both chemicals, but how do I report on what? When does a toxic chemical cease to exist by neutralization?

Neutralization is the treatment method for both chemicals. If the pH is between 6 and 9, then the efficiency is 100 percent -- no toxic chemicals are released -- no off-site transfer need be reported. If the waste is acidic, report transfer of HCl off-site and calculate efficiency from input and remaining acid; no NaOH is released. For a basic waste, acid is 100 percent neutralized and the efficiency is 100 percent with no HCl transfer off-site, but the NaOH must be reported as an off-site transfer.

198. If sodium hydroxide (solution) is spilled, but neutralized before leaving plant boundaries, should the quantity spilled be included in the facility's release report?

No.

199. How is an auxiliary scrubber that is designed and used only to mitigate emergency releases reported?

The influent concentration and treatment efficiency of the scrubber as it operates during an emergency event should be reported. The emergency scrubber is not considered to be "sequential" treatment with a scrubber which treats routine emissions from the same process, unless the two units function in series on a single wastestream.

200. Should the influent concentration to treatment for metal compounds be reported for the parent metal only?

Yes.

IX. TRANSFERS TO OFF-SITE LOCATIONS

201. A facility sends a 313 toxic chemical in waste off-site to a TSDF which, in turn, sends the waste to another facility for recycling. Does the facility not list this activity, since the waste is ultimately recycled? Or should they report as M90: Other Off-site Management in Part III Section 6C, since it is a location to which they transfer wastes?

Part VII of the preamble to the section 313 final rule states that "transfer to a reprocessor or recycler of chemical waste are not reportable as off-site transfers." Since the reporting facility knows the toxic chemical is ultimately being recycled or reprocessed, the facility would not report the off-site transfer. If the facility could not document that the waste was being recycled, it must report the off-site transfer.

202. What about shipment for recycle? For example "empty" drums containing a residue of a toxic chemical are sent to a drum remediation site which is not a treatment, storage, or disposal facility. Are such facilities listed as off-site TSD facilities? (The chemical is not being recycled, but the carrier, that is the container, is.)

Shipments for recycle of the chemical should not be reported. However, recycle of drums or recycle of other constituents of a waste does not qualify as recycle of the chemical: such transfers should be reported. The example cited should be reported as an off-site transfer with appropriate code such as M99- unknown, or M61- wastewater treatment.

203. Why does the section 313 form require disclosure of off-site locations to which toxic chemicals are transferred? The Act only requires the disposal method employed.

The conference committee report directed EPA to require reporting of releases to air, water, land, and waste treatment and disposal facilities. Legislative history treats off-site facilities as an equivalent environmental medium. EPA believes Congress intended to include reporting of quantities and locations of off-site waste treatment and disposal facilities to identify how and where chemicals enter the environment.

204. Why is there a treatment code in Table I for reuse/recovery when the section 313 final rule specifically states in the preamble that "transfers to a reprocessor or recycler of chemical waste are not reportable as off-site transfers?"

Recycle of the <u>chemical</u> need not be reported. The facility can use a recycle code for the waste shipped offsite when that best describes the activity and the chemical is not being recycled. For example, a report on metal containing pigment could report off-site distillation to recover solvent, although the metal (or pigment) is not being recovered.

205. How do we treat a solvent sent off-site for distillation and returned to us for use?

The amount of solvent sent to another facility for distillation is not reported as a transfer of the chemical to an off-site location (i.e., it should not be reported in Part III, Section 6 of the form). The quantity of the solvent returned to you must be treated as if it were a quantity of the chemical purchased from any other supplier and must be used for threshold determination.

206. What RCRA ID Number do we list if we send a non-hazardous waste containing a section 313 chemical to a solid waste landfill?

If an off-site location such as a solid waste landfill does not have a RCRA ID Number, you would enter N/A in the space provided. If the facility does have such an ID number, you must list it if you know it, even though the waste being transferred may not be a listed RCRA hazardous waste.

207. Our facility produces 200,000 pounds of waste annually. Of that amount, we treat 100,000 pounds on-site and send 100,000 pounds to an off-site treatment plant that has a 99.9 percent efficiency. Can we factor in the efficiency when we report the off-site transfer amount in Part III Section 6 of Form R?

That section of Form R requires you to report the actual amount of toxic chemical you send off-site. The efficiency would be taken into account by the off-site facility if they are reporting.

208. A printer uses a solvent to clean presses and sends soiled rags to a launderer. Is the material sent to the launderer considered waste transferred to an off-site location? Which disposal code should be used?

Yes, it is considered an off-site transfer. The facility could use code M90 - Other Off-site Management or M99 - Unknown.

X. WASTE MINIMIZATION

209. What is included in waste minimization? Are solid wastes as well as hazardous wastes included?

Waste minimization means reduction of the generation of listed toxic chemicals in wastes. Waste minimization reporting applies to air emissions, solid wastes, wastewater and liquid materials that are released, disposed, or treated.

210. What do facilities that have not performed any waste minimization include in the report?

The waste minimization portion of the reporting form is optional.

211. Where can facilities obtain figures from the previous year?

Companies can obtain waste minimization information about the year prior to reporting from various sources including but not limited to inventory data, recycle/reuse data, engineering reports on process modification, and product development studies.

212. If a facility modifies a process for economic reasons resulting in a waste reduction, should this be reported as minimization?

Yes. Any changes that result in less of the listed toxic chemical being generated in waste may be included. Codes are provided to identify changes such as equipment and technology modifications, as well as process changes, procedure modifications, and improved housekeeping.

213. Would RCRA-permitted incineration of waste count as waste minimization under M8 (Other Treatment Methods)?

Treatment or disposal can not be reported as waste minimization on Form R. The emphasis is placed on facility activities that reduce generation of wastes and not treatment of wastes.

XI. TRADE SECRETS

214. How can the identity of a listed toxic chemical be protected from disclosure for trade secrecy purposes?

Section 313 allows only the specific identity of a chemical to be claimed as a trade secret. The rest of the reporting form must be completed including releases of the chemical. For trade secrecy claims, two versions of the form (one identifies the chemical and one contains only a generic chemical identity) and a trade secret substantiation form must be completed.

215. On Form R, if I don't check the "Trade Secrets" box in Part III Section 1.1, what other blocks can I leave blank? Do I still have to fill in the CAS number?

If the chemical you are reporting is <u>not</u> a trade secret, the CAS number must be filled in along with the chemical name (Part III, Section 1.3). However, if you are reporting for a chemical category, no CAS number applies. Trade secret claims require that the generic name (Section 1.4) be completed.

216. How can competitors find out what has been reported to EPA?

Any person, including a competitor, can gain access to the non-trade secret reports received under section 313. All information received under section 313 is public information except the specific identity of the reported chemical that is claimed trade secret. All non-trade secret information reported will be available in a computer database.

217. For claiming trade secrets under Title III, would disclosure without a confidentiality agreement to the State and/or city having jurisdiction negate the chemical identity's trade secret status under Federal provisions?

In general, any disclosure of the chemical identity would negate the chemical identity's trade secret status under Federal provisions. Once the trade secret claim is made, State governors are permitted to request the specific chemical identity, and they have the discretion as to whether they provide the information to any State employees.

218. How will trade secret data be protected when EPA publishes health effects notices for the public?

A generic statement of the health and environmental effects of the chemical will be made available through the computer database.

XII. CERTIFICATION AND SUBMISSION

219. Where and how do I get copies of the forms?

Copies of the form and other support documents may be obtained by contacting: Emergency Planning and Community Right-To-Know Document Distribution Center, P.O. Box 12505, Cincinnati, Ohio 45212.

220. Are there any extensions that a facility could get for filing Form R?

No, all toxic chemical release inventory forms must be postmarked no later than July 1, and no extensions will be given.

221. Can computer generated forms be submitted for compliance with section 313?

The Agency has approved the facsimile outputs of certain privately developed software packages. A list of the providers of software packages will be made available by EPA.

222. What is the status of magnetic media submission (e.g., on tape or floppy disk) for section 313 reports?

The Agency has published instructions for magnetic media submission. Contact the Emergency Planning and Community Right-To-Know Information Hotline or write to the Emergency Planning and Community Right-to-Know Document Distribution Center.

223. The instructions state that photocopied versions of Part I may be submitted. Does that mean that the senior official at a facility certifying the validity of the forms only has to sign one submission?

No. The final rule states that each unique chemical submission must contain an original signature. The purpose of this requirement is to ensure that the certifying official has reviewed each chemical submission.. A photocopied signature does not fulfill this purpose and would be considered an incomplete submission.

224. If a facility has a manager who is the originator of the data in the form report, would he/she sign the form or would it be the facility manager to whom this manager reports?

Your facility must make the determination regarding who meets the definition in the rule of a "senior management official."

225. Are facilities required to include an original signature on forms going to the State as well as EPA?

An original signature on the certification statement is not required under EPA's rule for the copy that is sent to the State. However, if the state requires an original signature under their state right-to-know laws, the facility must comply.

226. If the public contact item (Part I, Section 3.4) is left blank, can the facility later use a public contact to speak to the news media on behalf of the technical contact, who may not be publicly conversant?

If a public contact is not identified, EPA will enter the technical contact into this information element in the database. Thus this person would receive public inquiries. You may, of course, use any other person you choose to deal with the public in response to such inquiries.

227. Regarding the technical contact, can this person be a different person for (a) each chemical? (b) each separate part of a facility?

Yes. It is allowable to have different technical contacts for different chemicals or different establishments within the facility provided that only one "technical contact" is listed on each form.

228. On enforcement: Are your plans to go after non reporters first before you begin "auditing" reports from complying facilities?

Enforcement efforts during 1989 will focus on identifying non reporters. In addition, notices of non-compliance will be issued for forms containing errors or omissions, allowing a period of time for corrections before penalties are assessed. Also, submissions with questionable technical entries will be investigated not purely as enforcement, but to identify problems in calculating releases to improve EPA's guidance and instruction documents.

229. Are specific audit provisions in the regulations? Will audit results be made public? Can released information be changed? What about resolving differences of opinion, i.e., does the auditor have final judgement?
Specific audit provisions are not in the regulations. The Agency, however, has the responsibility to assure that the data submitted is based on reasonable estimates. Audit results will be used to identify problems with calculating releases. In resolving difference of opinion, we expect that final judgement will be made by the Agency.

230. What type of quality control check will EPA make on each form it receives?

EPA plans to incorporate edit checks in the database to identify missing, incomplete, incorrect, and suspect data elements.

231. How will questionable data be identified by EPA?

OTS is developing checks of completeness and, for some types of data, reasonableness of an entry. For example, zero air emissions of a volatile

chemical would be flagged. OTS envisions contacting the facility for clarification of such "questionable" data.

232. The enforcement requirements of Title III (Section 325), state that the civil and administration penalties for section 313 non-compliance shall not exceed $25,000 for each violation. Is a non-compliance violation determined on a per facility or per toxic chemical basis? Also, is that penalty assessed on a per day basis?

Section 325(c)(i) states: "any person who violates any requirement of section 313 shall be liable to the United States for a civil penalty in an amount not to exceed $25,000 for each such violation", for each day a violation continues. Therefore, the facility can be assessed a penalty for each Form R not submitted or willfully submitted wrong, and the penalty can be assessed on a per day basis. EPA intends to assess penalties on a per chemical/facility basis with the option of also including per day penalties depending on the circumstances of the violation.

233. In some sections of Form R, facilities are asked to report "N/A" if that section does not apply to a submission. Are blank spaces left on the form the equivalent of "N/A"?

No. The rule requires "N/A" to be entered to inform the Agency that the submitter has not just overlooked a section of the form. Leaving blanks would be considered non-compliance with the rule.

234. Can a facility submit one original copy each of Parts I (Facility Identification Information) and II (Off-Site Locations) with several copies of Part III (Chemical Specific Information) for different listed chemicals?

No. The final rule clearly requires that each completed submission contains all parts of Form R (including Part IV, even if it is left blank). Submission of multiple copies of Part III, with only one copy of Parts I and II, would be considered non-compliance. A Part I can be filled out once and photocopied for inclusion in each report, but each copy of Part I requires an original certification signature.

235. How can a facility be assured that the Agency has received a submitted form?

To be acknowledged of receipt of submissions, facilities should send forms using the U.S. Post Office "Return Receipt Requested" mail service. The Agency will not respond to cover letters requesting acknowledgement.

XIII. EPA'S SECTION 313 PROGRAM AND GENERAL INFORMATION

236. Where is the court case citation that defines Title III of the Superfund Amendments and Reauthorization Act (SARA) as a distinct law separate from the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA)?

The court case was decided on August 25, 1987 in the U.S. Court of Appeals (D.C. Circuit), case number 87-1334, A.L. Laboratories vs. EPA, 826 F. 2d 1123 (D.C. Circuit 1987).

237. Where will information on toxic chemical emissions and health effects be made available?

The toxic release inventory database will provide information on the toxic chemicals which are routinely released to the environment. A computer database should be available to the public through the National Library of Medicine's TOXNET computer system by the spring of 1989. Health and environmental effects information on the §313 chemicals will also be available through TOXNET. EPA also intends to make the data available on microfiche to all county public library systems. In addition, EPA will publish a national report summarizing the data submitted. A magnetic tape of the entire database may also be purchased from NTIS.

238. Will EPA be calculating or monitoring concentrations of toxics in ambient air?

The Agency plans to use the TRI data for the purposes of screening and identifying potential environmental problems. To date, no decision has been made regarding how the EPA program offices will utilize the TRI data.

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ADDITIONAL MATERIALS AVAILABLE ON SECTION 313:

For copies of these materials, send in the request form included in the booklet or write to:

Section 313 Document Distribution Center
P.O. Box 12505
Cincinnati, OH 45212

- **Section 313 Rule** (FR Reprint)
  A reprint of the final section 313 rule as it appeared in the Federal Register (FR) February 16, 1988.

- **TRI Magnetic Media Submission Guidance Package** (EPA 560/7-88-003)
  Reports under section 313 may be submitted by computer tape or floppy disk. This guidance package gives the format requirements and other details for such submissions.

- **Toxic Chemical Release Inventory Questions and Answers** (EPA 560/4-89-002)
  Answers to frequently asked questions about the section 313 rule, organized by subject area.

- **Section 313 Technical Questions and Answers Document**

- **Common Synonyms for Section 313 Chemicals** (OTS-ETD-001)
  This document contains common synonyms for the specifically listed section 313 chemicals (synonyms for chemicals in covered categories are not included).

- **Comprehensive List of Chemicals Subject to Reporting Under the Act (Title III List of Lists)** (EPA 560/4-88-003)
  A consolidated list of specific chemicals covered by the Emergency Planning and Community Right-to-Know Act. The list contains the chemical name, CAS Registry Number, and provides specific information on what reporting requirement(s) the chemical is subject to.

- **Supplier Notification Requirements Brochure** (EPA 560/4-88-008)

- **Trade Secrets Rule and Form** (Section 322 of Title III)
  A reprint of the current rule to implement the trade secrets provision of the Emergency Planning and Community Right-to-Know Act (Section 322) and a copy of the trade secret substantiation form.

- **Industry Specific Technical Guidance Documents**
  The Agency has developed a group of smaller, individual guidance documents that target activities in industries who primarily process or use the listed toxic chemicals.

Also available:

- **Comprehensive List of Chemicals Subject to Reporting Under the Act (Title III List of Lists)**
  Available as an IBM compatible disk from: The National Technical Information Service, 5285 Port Royal Road, Springfield, VA 22161, (703) 487-4650, Document Number: PB 88-193255, $50.00.

- **Estimating Releases and Waste Treatment Efficiencies for the Toxic Chemical Release Inventory** (EPA 560/4-88-022)
  Suggested methods on the development of release estimates and waste treatment efficiency calculations required on Form R. Available from: Superintendent of Documents, Government Printing Office, Washington, D.C. 20402-9325, (202) 783-3238, Stock Number: 055-000-00270-3, $11.00.